

CLAIMS

1. A shape transferring cannula system comprising:
a first rigidizing section;
a steerable tip coupled to a distal end of said first rigidizing section;
a second rigidizing section coupled to said first rigidizing section, wherein said second rigidizing section is parallel to said first rigidizing section; and
a control mechanism coupled to said first rigidizing section and to said second rigidizing section for alternately advancing said first rigidizing section and said second rigidizing section.
2. The shape transferring cannula system of Claim 1, wherein said first rigidizing section surrounds said second rigidizing section.
3. The shape transferring cannula system of Claim 1, wherein said second rigidizing section surrounds said first rigidizing section.
4. The shape transferring cannula system of Claim 1, further comprising an accessory lumen contained within said first rigidizing section.
5. The shape transferring cannula system of Claim 1, further comprising an accessory lumen contained within said second rigidizing section.
6. The shape transferring cannula system of Claim 1, wherein said first rigidizing structure and said second rigidizing section are coaxial.
7. The shape transferring cannula system of Claim 1, wherein said first section and said second section are laterally parallel.
8. The shape transferring cannula system of Claim 1, wherein said second rigidizing section is a linkage sheath comprising:

two cable-guiding channels an equal radial distance from a central axis of said linkage sheath;

a pulley at a distal end of said linkage sheath; and

a cable wrapping around said pulley and residing in said two cable-guiding channels.

9. The shape transferring cannula system of Claim 8, wherein said pulley is positioned off-axis.

10. A shape transferring cannula system comprising:

a first section;

a second section laterally parallel to said first section and slidably coupled to said first section, wherein at least one of said first and second sections is a rigidizing section;

a steerable tip coupled to a distal end of said first section; and

a control mechanism coupled to said first section and to said second section for alternately advancing said first section and said second section.

11. The shape transferring cannula system of Claim 10, further comprising an accessory lumen contained within said first section.

12. The shape transferring cannula system of Claim 10, further comprising an accessory lumen contained within said second section.

13. The shape transferring cannula system of Claim 10, wherein said first section is a rigidizing section.

14. The shape transferring cannula system of Claim 10, wherein said second section is a rigidizing section.

15. The shape transferring cannula system of Claim 10, wherein said first section is a rigidizing section and said second section is a rigidizing section.

16. A shape transferring cannula system comprising:
a first section;
a rigidizing second section slidably coupled to and surrounding said first section;
a steerable tip coupled to a distal end of one section; and a control mechanism coupled to said first section and to said second section for alternately advancing said first section and said second section.

17. The shape transferring cannula system of Claim 16, wherein a steerable tip is coupled to a distal end of said first section.